

Title (en)

Method and apparatus for measuring resistivity of an earth formation

Title (de)

Verfahren und Anordnung zur Messung des Widerstandes von Erdformationen

Title (fr)

Procédé et dispositif de mesure de la résistivité des formations terrestres

Publication

EP 0903591 A3 20011010 (EN)

Application

EP 98307520 A 19980916

Priority

- US 5955497 P 19970919
- US 14801398 A 19980904

Abstract (en)

[origin: EP0903591A2] The method and apparatus of the invention determines earth formation resistivity at extended depths into the formation by the use of telemetry transmission signals to measure the formation resistivity. The telemetry transmission signals carry measurement data from downhole sensors (78) through the formation to an uphole receiver (80). The signal transmission is by means of induction telemetry. At the receiver (80), the signal is demodulated to obtain the transmitted measurement data. During the detection of the signal at the receiver, the signal amplitude is also extracted and is used to determine the formation resistivity. In addition, changes in the signal amplitude are also used to indicate formation boundaries for determining well location during directional drilling. <IMAGE>

IPC 1-7

G01V 3/28; **E21B 47/12**; **G01V 3/30**; **G01V 3/34**

IPC 8 full level

E21B 47/12 (2012.01); **G01V 3/28** (2006.01)

CPC (source: EP US)

E21B 47/12 (2013.01 - EP US); **E21B 47/13** (2020.05 - EP US); **G01V 3/28** (2013.01 - EP US)

Citation (search report)

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- [DY] EP 0289418 A2 19881102 - SCHLUMBERGER LTD [US], et al
- [A] "MWD TOOLS OPEN WINDOW AT BIT", OIL AND GAS JOURNAL, PENNELL PUBLISHING CO. TULSA, US, VOL. 91, NR. 21, PAGE(S) 86-87, ISSN: 0030-1388, XP000304112

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